

CHROMOSOME NUMBERS IN SOME NIGERIAN COMPOSITAE

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Abstract

Chromosome numbers of 49 species distributed in 28 genera of Compositae from Nigeria are reported.

Introduction

The Compositae family is represented in the flora of Nigeria by 288 species distributed in 84 genera (Gill, 1988). The family is somewhat neglected by cytotaxonomists and many species have not been examined cytologically. With this in mind a project "Cytological survey of the Nigerian Compositae" was undertaken by the senior author and earlier contributions in this series are Gill and Omoigui (1987, 1988). The present paper lists the chromosome numbers of 49 species distributed in 28 genera.

Material and Methods

Young flower buds were collected in the field and fixed in 1:3 acetic-alcohol solution for 24 hrs, then transferred into 70 % ethyl alcohol and stored under refrigeration until they could be examined. The anthers were squashed and stained in 2 % acetocarmine solution. The haploid chromosome numbers were determined from temporary slides. At least 15-20 well spread metaphase 1 and anaphase 1 plates were examined to confirm the chromosome number of each taxon. Voucher specimens of all the collections examined are kept at the University of Benin, Department of Botany Herbarium, Benin City, Nigeria. A duplicate set of

the voucher specimens has been deposited at FHI. The results obtained during the present study are summarized in Table 1 and the arrangement of taxa in Table 1 is alphabetical.

Results

Table 1. Chromosome Numbers in some Nigerian Compositae

Taxon	Haploid Chromosome Number	Source and Voucher
1. <i>Anisopappus africanus</i> (Hook.f.) Oliv.	14	Bauchi Rd., Jos, Omoigui 097
2. <i>A. dalzielii</i> Hutch.	14	Obudu Ranch, Omoigui 098
3. <i>Aspelia helianthoides</i> (Schum. & Thonn.) Oliv. & Hiern	14	Igbetti, Omoigui 111
4. <i>Blumea aurita</i> var. <i>foliolosa</i> (DC.) Adams	11	Kano, Omoigui 123
5. <i>Centaurea nigerica</i> Hutch.	10	Oyo-Ugbetti, Omoigui 133
6. <i>C. perrottetii</i> DC.	10	Kano, Omoigui 170
7. <i>Ceruana pratenis</i> Forssk.	16	Kaduna, Omoigui 168
8. <i>Chromolaena odorata</i> (L.) King & Robinson	30	Jos, Omoigui 136
9. <i>Coreopsis asperata</i> Hutch. & Dalz.	14	Jos, Omoigui 128
10. <i>C. barteri</i> Oliv. & Hiern	14	Vom; near Jos, Omoigui 093
11. <i>C. camporum</i> Hutch.	14	Jos, Omoigui 119
12. <i>Crassocephalum mannii</i> (Hook.f.) Milne-Redhead	10	Obudu Ranch, Omoigui 151
13. <i>Eupatorium africanum</i> Oliv. & Hiern	15	Obudu Ranch, Omoigui 023
14. <i>Felicia homochroma</i> S. Moore	9	Jos, Omoigui 166

15.	<i>Guizotia scabra</i> (Vis.) Chiov.	15	Jos, Omoigui 122
16.	<i>G. abyssinica</i> (L.f.) Cass.	15	Jos, Omoigui 169
17.	<i>Gutenbergia nigritana</i> (Bth.) Oliv. & Hiern	10	Jos, Omoigui 074
18.	<i>Helichrysum albiflorum</i> Mooser	7	Obudu Ranch, Omoigui 175
19.	<i>H. antunesii</i> var. <i>latifolium</i> C.D. Adams	7	Gembu, Omoigui 167
20.	<i>H. mechowianum</i> Klatt	7	Obudu Ranch, Omoigui 177
21.	<i>Inula klingii</i> O. Hoffm.	10	Jos, Omoigui 096
22.	<i>I. subscaposa</i> S. Moore	10	Gembu, Omoigui 172
23.	<i>Lactuca capensis</i> Thunb.	8	Jos, Omoigui 024
24.	<i>Laggera alata</i> (D.Don) Sch. Bip.	10	Obudu Ranch, Omoigui 067
25.	<i>Launaea nudicaulis</i> (L.) Hook. f.	9	Obudu Ranch, Omoigui 115
26.	<i>Melanthera elliptica</i> O. Hoffm.	16	Jos, Omoigui 116
27.	<i>Mollera angolensis</i> O. Hoffm.	9	Jos, Omoigui 124
28.	<i>Picris humilis</i> DC.	5	Vom; near Jos, Omoigui 85
29.	<i>Porphyrostemma chevalieri</i> (O. Hoffm.) Hutch. & Dalz.	11	Bauchi, Omoigui 088
30.	<i>Pulicaria crispa</i> (Forssk.) Oliv.	10	Bauchi, Omoigui 141
31.	<i>Senecio abyssinicus</i> Sch. Bip. ex A.Rich.	5	Kaura Falls, Omoigui 120
32.	<i>S. baberka</i> Hutch.	5	Jos, Omoigui 138
33.	<i>S. hochstetteri</i> Sch. Bip. ex A. Rich.	5	Jos, Omoigui 152
34.	<i>S. lelyi</i> Hutch.	5	Jos, Omoigui 117
35.	<i>Sonchus elliotianus</i> Hiern	9	Obudu Ranch, Omoigui 164
36.	<i>S. oleraceus</i> L.	16	Jos, Omoigui 112

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| 37. | <i>S. schweinfurthii</i>
Oliv. & Hiern | 9 | Gembu, Omoigui 190 |
| 38. | <i>Sphaeranthus flexuosus</i>
O. Hoffm. | 10 | Bauchi, Omoigui 081 |
| 39. | <i>S. senegalensis</i> DC. | 10 | Zaria, Omoigui 171 |
| 40. | <i>Synedrella nodiflora</i>
Gaertn. | 19 | Benin City, Omoigui 103 |
| 41. | <i>Vernonia ambigua</i>
Kotschy & Peyr. | 11 | Jos, Omoigui 129 |
| 42. | <i>V. biafrae</i> Oliv. & Hiern | 9 | Obudu Ranch, Omoigui 102 |
| 43. | <i>V. guineensis</i> var.
<i>cameroonica</i> (O.Hoffm.)
C.D. Adams | 9 | Obudu Ranch, Omoigui 108 |
| 44. | <i>V. macrocyanus</i> O. Hoffm. | 11 | Zaria, Omoigui 116 |
| 45. | <i>V. nestor</i> S. Moore | 9 | Obudi, Omoigui 131 |
| 46. | <i>V. saussureoides</i> Hutch. | 9 | Kaura Falls, Omoigui 092 |
| 47. | <i>V. stenostegia</i> (Stapf)
Hutch. | 9, 11 | Jos, Omoigui 087 |
| 48. | <i>V. smithiana</i> Less. | 10 | Obudu Ranch, Omoigui 146 |
| 49. | <i>Vicoa leptoclada</i> (Webb)
Dandy | 10 | Bauchi, Omoigui 086 |